

March 5, 1965

Dr. William J. Wiswesser  
Research Chemist, Crops Division  
U. S. Army Biological Laboratories  
Fort Detrick  
Frederick, Maryland 21701

Dear Dr. Wiswesser:

You are certainly no more surprised than I was to find how little was known about the systematics of polyhedra. The enclosed material, being assembled into Part 2 of the DENDRAL report, may give you a chance to share my mystification and the present state of clarification.

With minor revision, Blair & Henze's approach to the alkanes seems perfectly sound. I can think of no more direct approach to the more complex cases. Have you any substantive doubts? Our program is generating that series but if our deductive reasoning is fallacious I doubt if we could easily recognize the fault.

I did not recognize your reference to "43 fundamental types of tricyclic structures", but have not checked your book or your 1952 article. If it is not easily found there, could you clear this up for me?

The trihedral graphs through 8 vertices are implicit in my paper in P.N.A.S. Enclosed is a summary and listing of graphs of 10 and 12 vertices. Details on the coding will be in the report being finished just now.

Sincerely yours,

Joshua Lederberg  
Professor of Genetics